

Amendments to the Claims under 37 C.F.R. § 1.121

Claim 1 (currently amended): A truncated sTNFR polypeptide comprising amino acid residues 1-110, 1-109, 1-108, 1-107, 1-106, 1-105, 1-104, 1-103, 2-110, 2-109, 2-108, 2-107, 2-106, 2-105, 2-104, 2-103, 3-110, 3-109, 3-108, 3-107, 3-106, 3-105, 3-104, 3-103, 4-110, 4-109, 4-108, 4-107, 4-106, 4-105, 4-104, 4-103, 5-110, 5-109, 5-108, 5-107, 5-106, 5-105, 5-104, 5-103, 6-110, 6-109, 6-108, 6-107, 6-106, 6-105, 6-104, 6-103, 7-110, 7-109, 7-108, 7-107, 7-106, 7-105, 7-104, 7-103, 8-110, 8-109, 8-108, 8-107, 8-106, 8-105, 8-104, 8-103, 9-110, 9-109, 9-108, 9-107, 9-106, 9-105, 9-104, 9-103, 10-110, 10-109, 10-108, 10-107, 10-106, 10-105, 10-104, 10-103, 11-110, 11-109, 11-108, 11-107, 11-106, 11-105, 11-104, 11-103, 12-110, 12-109, 12-108, 12-107, 12-106, 12-105, 12-104, 12-103, 13-110, 13-109, 13-108, 13-107, 13-106, 13-105, 13-104, 13-103, 14-110, 14-109, 14-108, 14-107, 14-106, 14-105, 14-104, 14-103, 15-110, 15-109, 15-108, 15-107, 15-106, 15-105, 15-104, 15-103, 16-110, 16-109, 16-108, 16-107, 16-106, 16-105, 16-104, 16-103, 17-110, 17-109, 17-108, 17-107, 17-106, 17-105, 17-104, 17-103, 18-110, 18-109, 18-108, 18-107, 18-106, 18-105, 18-104, 18-103, 19-110, 19-109, 19-108, 19-107, 19-106, 19-105, 19-104, or 19-103 of SEQ ID NO: 2;

provided however, that when the ~~wherein said~~ truncated sTNFR polypeptide comprises amino acid residues 1-110, 2-110, 3-110, 4-110, 5-110, 6-110, 7-110, 8-110, 9-110, 10-110, 11-110, 12-110, 13-110, 14-110, 15-110, 16-110, 17-110, 18-110, or 19-110 of SEQ ID NO: 2, the polypeptide does not further comprise amino acid residues 111-161 of SEQ ID NO: 2[[,]] or a portion thereof;

and optionally further comprising an amino-terminal methionine.

Claim 2 (previously presented): An isolated truncated sTNFR polypeptide comprising the amino acid sequence as set forth in SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 12, SEQ ID NO: 10, or SEQ ID NO: 14;

provided however, that the truncated sTNFR polypeptide does not comprise amino acid residues 111-161 of SEQ ID NO: 2 or a portion thereof.

Claim 3 (cancelled).

Claim 4 (previously presented): The polypeptide of either Claim 1 or 2, wherein said amino acid sequence is nonglycosylated.

Claim 5 (previously presented): The polypeptide of either Claim 1 or 2, wherein said amino acid sequence is glycosylated.

Claim 6 (previously presented): The polypeptide of either Claim 1 or 2, wherein the protein is conjugated to a water soluble polymer.

Claim 7 (previously presented): A polyvalent truncated sTNFR molecule comprising at least one polypeptide of either Claim 1 or 2.

Claim 8 (previously presented): A polyvalent molecule having the formula R_1-X-R_2 , wherein:

X comprises a linker, wherein said linker is a water soluble polymer; and

R_1 and R_2 are biologically-active molecules covalently bonded to said water soluble polymer, wherein at least one of R_1 and R_2 is a polypeptide of either Claim 1 or 2.

Claim 9 (previously presented): The polyvalent molecule of Claim 8, wherein the water soluble polymer is polyethylene glycol.

Claim 10 (previously presented): The polyvalent molecule of Claim 9, wherein R_1 and R_2 are polypeptides comprising:

- (a) the amino acid sequence as set forth in SEQ ID NO: 4; or
- (b) the amino acid sequence as set forth in SEQ ID NO: 6.

Claim 11-21 (cancelled).

Claim 22 (previously presented): A truncated sTNFR polypeptide which is the recombinant expression product of a prokaryotic or eukaryotic host cell containing an exogenous polynucleotide encoding the polypeptide of either Claim 1 or 2.

Claim 23 (previously presented): A pharmaceutical composition comprising the polypeptide of either Claim 1 or 2 in association with a pharmaceutically acceptable vehicle.

Claim 24 (previously presented): A pharmaceutical composition comprising:

- A) a polypeptide produced by a process comprising the steps of growing a prokaryotic or eukaryotic host cell containing a polynucleotide encoding the polypeptide of either Claim 1 or 2 in a suitable nutrient medium and isolating the polypeptide from the host cell or nutrient medium; and
- B) a pharmaceutically acceptable vehicle.

Claim 25 (previously presented): A pharmaceutical composition comprising:

- A) a polypeptide produced by a process comprising the steps of:
 - (a) culturing a prokaryotic or eukaryotic host cell containing a polynucleotide encoding the polypeptide of either Claim 1 or 2;
 - (b) maintaining the host cell under conditions allowing the expression of the polypeptide by the host cell; and
 - (c) isolating the polypeptide expressed by the host cell; and
- B) a pharmaceutically acceptable vehicle.

Claims 26 and 27 (cancelled).

Claim 28 (previously presented): A method of preparing a pharmaceutical composition wherein a therapeutically effective amount of the polypeptide of either Claim 1 or 2 is mixed with one or more pharmaceutically acceptable vehicles.

Claims 29 and 30 (cancelled).

Claim 31 (previously presented): A kit for preparing an aqueous protein formulation comprising a first container having the polypeptide of either Claim 1 or 2 and a second container having a physiologically acceptable solvent.

Claim 32 (previously presented): The polypeptide of either Claim 1 or 2, wherein the protein is fused to a heterologous amino acid sequence.

Claim 33 (previously presented): The polypeptide of Claim 32, wherein the heterologous amino acid sequence is an IgG constant domain or fragment thereof.

Claim 34 (previously presented): A truncated sTNFR polypeptide which is the recombinant expression product of a prokaryotic or eukaryotic host cell containing an exogenous polynucleotide comprising a nucleotide sequence:

- (a) as set forth in SEQ ID NO: 3;
 - (b) as set forth in SEQ ID NO: 5;
 - (c) as set forth in SEQ ID NO: 7;
 - (d) as set forth in SEQ ID NO: 11;
 - (e) as set forth in SEQ ID NO: 9;
 - (f) as set forth in SEQ ID NO: 13;
 - (g) that is a degenerate sequence of the nucleotide sequence of any of (a) - (f); or
 - (h) encoding a polypeptide that is at least 90 percent identical to the polypeptide encoded by the nucleotide sequence of any of (a) - (g);
- provided however, that the polypeptide does not comprise amino acid residues 111-161 of SEQ ID NO: 2 or a portion thereof;
- and optionally further comprising a nucleotide sequence encoding an amino-terminal methionine.

Claim 35 (currently amended): A truncated sTNFR polypeptide which is the recombinant expression product of a prokaryotic or eukaryotic host cell containing an exogenous polynucleotide comprising a nucleotide sequence as set forth in SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 11, SEQ ID NO: 9, or SEQ ID NO: 13, or a TNF inhibitory fragment thereof;

provided however, that the truncated sTNFR polypeptide does not comprise amino acid residues 111-161 of SEQ ID NO: 2 or a portion thereof.

Claim 36 (previously presented): A pharmaceutical composition comprising:

A) a polypeptide produced by a process comprising growing a prokaryotic or eukaryotic host cell containing a polynucleotide comprising a nucleotide sequence:

- (a) as set forth in SEQ ID NO: 3;
- (b) as set forth in SEQ ID NO: 5;
- (c) as set forth in SEQ ID NO: 7;
- (d) as set forth in SEQ ID NO: 11;
- (e) as set forth in SEQ ID NO: 9;
- (f) as set forth in SEQ ID NO: 13;
- (g) that is a degenerate sequence of the nucleotide sequence of any of (a) - (f);

or

(h) encoding a polypeptide that is at least 90 percent identical to the polypeptide encoded by the nucleotide sequence of any of (a) - (g);

provided however, that the polypeptide does not comprise amino acid residues 111-161 of SEQ ID NO: 2 or a portion thereof;

and optionally further comprising a nucleotide sequence encoding an amino-terminal methionine;

in a suitable nutrient medium and isolating the polypeptide from the host cell or nutrient medium; and

B) a pharmaceutically acceptable vehicle.

Claim 37 (previously presented): A pharmaceutical composition comprising:

- A) a polypeptide produced by a process comprising growing a prokaryotic or eukaryotic host cell containing a polynucleotide comprising a nucleotide sequence as set forth in SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 11, SEQ ID NO: 9, or SEQ ID NO: 13, or a TNF inhibitory fragment thereof, wherein the polypeptide does not comprise amino acid residues 111-161 of SEQ ID NO: 2 or a portion thereof, in a suitable nutrient medium and isolating the polypeptide from the host cell or nutrient medium; and
- B) a pharmaceutically acceptable vehicle.

Claim 38 (previously presented): A pharmaceutical composition comprising:

- A) a polypeptide produced by a process comprising:
 - (a) culturing a prokaryotic or eukaryotic host cell containing a polynucleotide comprising a nucleotide sequence:
 - (i) as set forth in SEQ ID NO: 3;
 - (ii) as set forth in SEQ ID NO: 5;
 - (iii) as set forth in SEQ ID NO: 7;
 - (iv) as set forth in SEQ ID NO: 11;
 - (v) as set forth in SEQ ID NO: 9;
 - (vi) as set forth in SEQ ID NO: 13;
 - (vii) that is a sequence of the nucleotide sequence of any of (i) - (vi); or
 - (viii) encoding a polypeptide that is at least 90 percent identical to the polypeptide encoded by the nucleotide sequence of any of (i) - (vi);provided however, that the polypeptide does not comprise amino acid residues 111-161 of SEQ ID NO: 2 or a portion thereof;
 - and optionally further comprising a nucleotide sequence encoding an amino-terminal methionine;
- (b) maintaining the host cell under conditions allowing the expression of the polypeptide by the host cell; and
- (c) isolating the polypeptide expressed by the host cell; and

B) a pharmaceutically acceptable vehicle.

Claim 39 (previously presented): A pharmaceutical composition comprising:

A) a polypeptide produced by a process comprising:

(a) culturing a prokaryotic or eukaryotic host cell containing a polynucleotide comprising a nucleotide sequence as set forth in SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 11, SEQ ID NO: 9, or SEQ ID NO: 13, or a TNF inhibitory fragment thereof, wherein the polypeptide does not comprise amino acid residues 111-161 of SEQ ID NO: 2 or a portion thereof, in a suitable nutrient medium;

(b) maintaining the host cell under conditions allowing the expression of the polypeptide by the host cell; and

(c) isolating the polypeptide expressed by the host cell; and

B) a pharmaceutically acceptable vehicle.

Claim 40 (previously presented): The polypeptide of Claim 6, wherein the water soluble polymer is polyethylene glycol.

Claim 41 (previously presented): A pharmaceutical composition comprising the polyvalent truncated sTNFR molecule of Claim 7 in association with a pharmaceutically acceptable vehicle.

Claim 42 (previously presented): A method of preparing a pharmaceutical composition wherein a therapeutically effective amount of the polyvalent truncated sTNFR molecule of Claim 7 is mixed with one or more pharmaceutically acceptable vehicles.

Claim 43 (previously presented): A kit for preparing an aqueous protein formulation comprising a first container having the polyvalent truncated sTNFR molecule of Claim 7 and a second container having a physiologically acceptable solvent.

Claim 44 (cancelled).